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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------------|-----------------------------|
| 10/656,543 | 09/05/2003 | Bram Peeters | 920476-94778 | 8167 |
| 23644 7590 01/28/2008 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786 | | | EXAMINER SINGH, DALZID E | |
| | | | ART UNIT 2613 | PAPER NUMBER |
| | | | NOTIFICATION DATE 01/28/2008 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

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| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/656,543 | Applicant(s) PEETERS ET AL. | |
| | Examiner Dalzid Singh | Art Unit 2613 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/5/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 14 recites "A computer program stored on a computer readable medium..."

There is no support of such claim in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 16 provide for the use of "a routing algorithm" and "the plurality of optically viable photonic paths", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is

intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1 and 16 are rejected under 35 U.S.C. 101 because the claimed recitation of a use , without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 8 provides for the use of "combined metric", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 8 is rejected under 35 U.S.C. 101 because the claimed recitation of a use , without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaudhuri et al (US Patent No. 7,039,009).

Regarding claims 1 and 16, a method of selecting an optically viable path through which to route a connection from a first node to a second node of a photonic network, the method comprising:

selecting a plurality of optically viable photonic paths in the photonic network, at least one of the optically viable photonic paths comprising a plurality of consecutive optical links (see Fig. 1);

using a routing algorithm to select a path from the first node to the second node, the routing algorithm using the plurality of optically viable photonic paths as at least part of the topological context when selecting the path (see col. 6, lines 54-col. 7, lines 24).

Regarding claim 8, Chaudhuri et al disclose a wherein the routing algorithm uses a combined metric for the at least one optically viable photonic path comprising a

plurality of consecutive optical links, the combined metric being calculated in dependence on metrics associated with the plurality of consecutive optical links (see col. 6, lines 54-col. 7, lines 24; the algorithm is based on topology and plurality of links).

Regarding claim 9, wherein the combined metric is calculated in dependence on a metric associated with the one or more photonic switches linking the plurality of consecutive optical links (see col. 6, lines 54-col. 7, lines 24; the router is photonic switches).

Regarding claim 10, wherein only those optically viable photonic paths with terminating nodes which perform electronic switching are included in the plurality of optically viable photonic paths (as shown in Fig. 2, the IP router is electronic switching).

Regarding claim 11, wherein only those optically viable photonic paths with terminating nodes which are capable of being dynamically controlled to perform electronic switching are included in the plurality of optically viable photonic paths, and wherein the method comprises the step of:

provisioning a connection across the selected path from the first node to the second node;
controlling terminating nodes of one or more optically viable photonic paths of the selected path to perform electronic switching at least for an optical wavelength provisioned (see col. 6, lines 54-col. 7, lines 24).

Regarding claim 14, computer program stored on a computer readable medium for performing the method of any claim 1 (it is inherent that the algorithm is stored on a computer or processor for performing the method of claim 1).

Regarding claim 15, apparatus arranged to perform the method of claim 1 (see Fig. 1).

Regarding claim 22, a photonic network comprising a system according to claim 16 (see Fig. 1).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steinberg et al (US Pub. No. 2004/0136324) is cited to show segmented and distributed path optimization in a communication network.

Acharya et al (US Pub. No. 2004/0228323) is cited to show route precomputation method and apparatus for bandwidth guaranteed traffic.

Liu (US Patent No. 5,914,798) is cited to show restoration systems for an optical telecommunications network.

Fee (US Patent No. 5,884,017) is cited to show method and system for optical restoration tributary switching in a fiber network.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 17, 2007

DALZID SINGH
PRIMARY EXAMINER
Dalzid Singh